We claim:

1. A substantially purified nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 43 and complements thereof.

2. A substantially purified nucleic acid molecule that encodes a protein comprising an amino acid sequence selected from the group consisting of SEQ ID NO: 44 through SEQ ID NO: 86.

3. A transformed cell or organism comprising a nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 43 and complements thereof.

4. The transformed cell or organism according to claim 3, wherein said cell or organism is a plant cell or plant.

5. The transformed cell or organism according to claim 4, wherein said cell or organism is a plant selected from the group consisting of cotton, wheat, maize, teosinte and soybean.

6. A substantially purified protein comprising an amino acid sequence selected from the group consisting of SEQ ID NO: 44 through SEQ ID NO: 86.

7. A purified antibody which is capable of specifically binding to a protein, wherein the protein comprises an amino acid sequence selected from the group consisting of SEQ ID NO: 44 through SEQ ID NO: 86.

8. A transformed plant having a nucleic acid molecule which comprises: (A) an exogenous promoter region which functions in a plant cell to cause the production of a mRNA molecule; (B) a structural nucleic acid molecule encoding a protein comprising an amino acid sequence selected from the group consisting of SEQ ID NO: 44 through SEQ ID NO: 86 and fragments thereof, and (C) a 3' non-translated sequence that functions in a

plant cell to cause termination of transcription and addition of polyadenylated ribonucleotides to a 3' end of the mRNA molecule.

9. The transformed plant according to claim 8, wherein said plant is maize.

10. The transformed plant according to claim 8, wherein said plant is soybean.

11. A transformed plant having a nucleic acid molecule which comprises: (A) an exogenous promoter region which functions in a plant cell to cause the production of a mRNA molecule; which is linked to (B) a transcribed nucleic acid molecule with a transcribed strand and a non-transcribed strand, wherein the transcribed strand is complementary to a nucleic acid molecule encoding a protein comprising an amino acid sequence selected from the group consisting of SEQ ID NO: 44 through SEQ ID NO: 86; which is linked to (C) a 3' non-translated sequence that functions in plant cells to cause termination of transcription and addition of polyadenylated ribonucleotides to a 3' end of the mRNA molecule.

12. The transformed plant according to claim 11, wherein said plant is maize.

13. The transformed plant according to claim 11, wherein said plant is soybean.